

## ABSTRACT

A wireless gateway (10) subject to the IEEE 802.11b protocol includes a central processing unit (CPU) (101) for restructuring and transmitting Internet protocol (IP) packets, at least one synchronous dynamic random access memory (SDRAM) (102) connected with the CPU for exchanging data with the CPU and for storing application programs, a flash memory (103) connected with the CPU for storing driving programs and related configurations, a crystal oscillator (104) connected with the CPU for providing clock signals for the CPU, an Ethernet transceiver (106) connected with the CPU for transmitting and receiving Ethernet frames, and at least one port connected with the CPU for connecting one or more computers and/or computer peripherals in a wireless manner.